Biodeterioration Abstracts

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DIVISION OF NATURAL RESOURCES, FORESTRY AND ECONOMICS

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Prior to April 1992 Biodeterioration Abstracts was produced by the International Mycological Institute, Editor Mrs. V.J. Dring, BSc. Founded in 1920, the Institute has from the first provided world services to mycologists and workers in related disciplines, particularly plant pathology, medical and veterinary mycology, and more recently, industrial mycology, biodeterioration, and biotechnology.

IDENTIFICATION SERVICE

Correct diagnosis of the cause of a disease, spoilage or industrial problem is the first step in finding an appropriate solution. IMI provides a reliable, up–to–date identification service for about 8,000 cultures and specimens each year, received from a wide variety of sources. Tropical plant pathogenic bacteria are also covered.

Staff are involved in wide–ranging research programmes on microfungal systematics. They produce about 80 scientific papers each year and also compile the Dictionary of the Fungi, Index of Fungi, Bibliography of Systematic Mycology, Systema Ascomycetum, Descriptions of Plant Pathogenic Fungi and Bacteria, and Distribution Maps of Plant Diseases.

The service is provided free of charge to non–commercial users in CABI member countries. Information on the submissions of materials and details of charges for users in non–member countries and in commercial organizations are available on request.

GENETIC RESOURCES REFERENCE COLLECTION

The Culture Collection, which incorporates the UK National Collection of Fungus Cultures, maintains over 16,500 strains; it is one of the largest service collections for fungus cultures in the world.

Cultures are available for sale world–wide for industrial, scientific and educational use, and metabolic and physiological data on the strains held is actively added to the Collection's databank.

A catalogue (1988 edition) listing the strains is available on request, free of charge. A new edition is to be published in late 1991. Additions to the collection are welcome, especially of fungi otherwise not represented in the collection or of biochemical, economic and industrial importance.

The Culture Collection is recognized as an International Depositary Authority for patent strains under the terms of the Budapest Treaty.

INDUSTRIAL AND ENVIRONMENTAL LABORATORY

The laboratory is accredited under the UK National Measurement Accreditation Service (NAMAS) and carries out a wide variety of industrial testing, contract research and consultancies. Over 70 contracts are carried out annually, involving a wide range of materials, such as automotive and aircraft parts, museum and library specimens, fuels and lubricants, electrical equipment, building materials and stored foods. Services involving organisms other than fungi can also be arranged, and a tropical testing facility is available.

BACTERIOLOGY LABORATORY

Part of the work of this laboratory involves its collaboration with the Industrial and Environmental Laboratory in the investigation of biodeterioration and environmental problems.

BIOCHEMICAL LABORATORY

The laboratory is involved in screening and checking large numbers of fungi for enzyme and metabolite production and to obtain physiological data.

Results are used both to enhance the Culture Collection Database and to develop improved identification methods.

FOOD AND BEVERAGE INVESTIGATION SERVICE

From January 1993, IMI has offered a new service to the food industry which includes: isolation and identification of food deterioration microorganisms; problem solving and prevention of food spoilage; development of microbiological methodology to suit specific problems; industrial hygiene and health and safety parameters; expert technical advice in areas of litigation.

INFORMATION

The IMI library holds a unique collection of literature on plant pathology, medical and veterinary mycology, biodeterioration, fungal biotechnology, and fungal taxonomy. It includes approximately 1000 current journals, over 30,000 volumes and books, and 139,000 reprints.

IMI collaborates with the Information Services of CABI in the publication of books and journals in its fields, including seven serial publications.

Literature searches and studies can be carried out to specific individual requirements, and a photocopy service is also available to provide copies of original source literature.

Further Details

Please write or telephone for our current Services and Publications booklet and any further information on specific services that you may require. All work is carried out by IMI on a confidential basis, and we will be pleased to discuss your individual requirements without obligation.

COMMENTS FROM USERS of **BIODETERIORATION ABSTRACTS** are always welcome.

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BIODETERIORATION ABSTRACTS

READERS' GUIDE

Biodeterioration Abstracts is compiled from the CAB ABSTRACTS database, and includes occasional review articles on topics of importance.

It provides a quarterly survey of the more important recent world literature on the biodeterioration of the environment (environmental pollution by living organisms), materials, artefacts or facilities of economic importance (including foodstuffs, timber, fuels, construction materials, etc.) and on biodegradation of waste materials to less objectionable, more easily disposable or higher-value products by living organisms.

Less obvious topics covered include the biofouling of structures and materials; desulfurization of coal; the extraction of metal ores by microbiological methods; the biodegradation of environmentally hazardous chemicals; and the adsorption of heavy metals by microorganisms.

Biodeterioration Abstracts comprises 2 main parts – Biodeterioration and Biodegradation, with sections on microbiological techniques, reports, conferences and books spanning both.

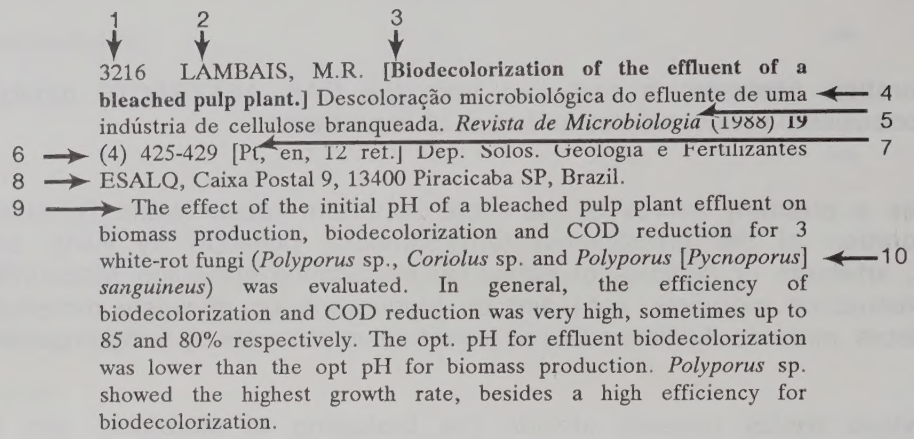
Serial publications, including other abstracting journals, together with miscellaneous publications and books are scanned. Each year, material from over 500 journals is abstracted. An effort is made to note all new data; previously published information, well known facts and popular articles may be omitted. Some background papers are given very brief notices, and some of local or marginal interest are cited by titles only.

When consulting an entry the reader should remember that the title is an integral part of the abstract and may include data necessary for its full comprehension.

In a typical citation the name(s) of the author(s) are followed by the title of the paper in English. If the paper is written in a language other than English, the English translation of the title is enclosed in square brackets. The title in the original language, if not English, follows, except for Arabic, Chinese, Japanese, or languages in the Cyrillic script, etc. Journal titles are next given in unabbreviated form. The year of issue, in round brackets, the volume number, part number in round brackets, the first and last page numbers of the article complete the basic citation.

Supplementary details given in square brackets include the language of the paper and the language of any summary or summaries in languages other than that of the paper ; and there may also be included the number of references. The affiliation of the first author is usually given.

A TYPICAL RECORD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3216 LAMBAIS, M.R. [Biodecolorization of the effluent of a bleached pulp plant.] Descoloração microbiológica do efluente de uma indústria de cellulose branqueada. Revista de Microbiologia (1988) 19
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(4) 425-429 [Pt, en, 12 ref.] Dep. Solos. Geologia e Fertilizantes
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8 ESALQ, Caixa Postal 9, 13400 Piracicaba SP, Brazil.
9 The effect of the initial pH of a bleached pulp plant effluent on biomass production, biodecolorization and COD reduction for 3 white-rot fungi (Polyporus sp., Coriolus sp. and Polyporus [Pycnoporus] sanguineus) was evaluated. In general, the efficiency of biodecolorization and COD reduction was very high, sometimes up to 85 and 80% respectively. The opt. pH for effluent biodecolorization was lower than the opt pH for biomass production. Polyporus sp. showed the highest growth rate, besides a high efficiency for biodecolorization.
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1) Abstract No.
2) Authors
3) English translation of title
4) Title
5) Journal or other document
6) (Year) Volume (Part) pages
7) Language of text, any other language of summary
8) Address of first author
9) Abstract
10) Preferred name, if the author uses another name.

ABBREVIATIONS

In the abstract a number of easily understood or commonly used abbreviations are used. The initial letter of a genus may be used after its full name has appeared in a record, e.g. *Tribolium castaneum*, *T. confusum.*

In abbreviations for languages an initial capital denotes the language of the paper, an initial small letter the language of the summary.